

**REMARKS**

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-2, 5-12, 15-19 and 21-24 are pending, with claims 1, 5-11 and 15-17 amended, claims 3, 13-14 and 20 cancelled without prejudice or disclaimer, and claims 21-24 added by the present amendment. Claims 1, 10-11 and 17 are independent.

In the Official Action, claims 1-3 and 9-13 were rejected under 35 U.S.C. § 103(a) as being in view of Cavallerano (U.S. Patent Pub. No. 2002/0057372) and Nakagaki (U.S. Patent No. 5,852,474); claims 5-7 and 14-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Cavallerano, Nakagaki and Official Notice; and claims 8 and 17-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Cavallerano, Nakagaki and Takahashi (U.S. Patent Pub. No. 2003/0099457).

Applicant acknowledges with appreciation the telephone interview between the Examiner and Applicant's representative on June 11, 2009. During the interview, the Examiner agreed that Cavallerano did not disclose or suggest all of the features of Applicant's previously pending claims.

Turning to the current rejection, as a first point of order, the Office Action summary again indicates that claims 1-20 are pending. However, only claims 1-3 and 5-20 were pending at the time that the Official Action was issued. Applicant requests that the Office Action summary accurately reflect the status of the claims.

Claims 1, 5-11 and 15-17 are amended, and claims 21-24 are added, to more clearly describe and distinctly claim Applicant's invention. Support for this amendment can be found in Applicant's originally filed specification.<sup>1</sup> No new matter is added.

Briefly recapitulating, amended independent claim 11 is directed to

An image recording and reproducing apparatus, comprising:

a tuner configured to tune a broadcast signal;

a mode setup unit configured to set a mode of the broadcast signal outputted from the tuner;

a recording/storing unit configured to selectively store the broadcasting signal according to the mode set by the mode setup unit;

a live decoding unit configured to decode a live signal outputted from the tuner;

a time shift decoding unit configured to decode a time shift signal outputted from the recording/storing unit, wherein the time shift signal is a time delayed signal of the live signal outputted from the tuner;

a signal processing unit configured to process the decoded live signal and the decoded time shift signal; and

a display unit configured to display the processed signals,

*wherein the live signal and the time shift signal are displayed simultaneously.*

Amended claim 1 also recites, *inter alia*, "wherein the live signal and the time shift signal are displayed simultaneously."

Figure 1 of Cavallerano shows a television set 2 with a main display 3 and PIP display 4. Figure 2 is a block diagram of a smart PIP system where instead of the PIP being either on or off, the PIP device is operating in the background searching for a predefined condition or event.

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<sup>1</sup> Specification, Figs. 2 and 4C, and paragraphs [0044], [0045], [0061] and [0062]

Whether predefined condition or event is found, then the PIP window is turned on.<sup>2</sup> The PIP channel tuner/demodulator 20 receives an RF video and or audio information from a plurality of programs and tunes into a display program. The digital PIP program is then decoded in the PIP channel decoder 40. The PIP formatting and memory 50 formats the video information of the PIP program for the smaller PIP display.<sup>3</sup>

However, as acknowledged in the Official Action, Cavallerano does not disclose or suggest features related to simultaneously displaying a live signal and a time shift signal. Rather, Fig. 2 of Cavallerano shows receiving broadcast signal from two tuners (i.e., Main channel and PIP channel). Furthermore, because Cavallerano only shows receiving broadcast signal from two tuners, Cavallerano does not disclose or suggest Applicant's claimed recording/storing unit or Applicant's claimed time shift decoding unit configured to decode a time shift signal outputted from the recording/storing unit, wherein the time shift signal is a time delayed signal of the live signal outputted from the tuner.

The Official Action argues that Nakagaki cures the deficiencies of Cavallerano. Applicant traverses.

Nakagaki describes a television receiver that includes a video signal processing circuit for receiving a video signal, converting the signal into a video display signal, and outputting the signal therefrom; a video signal storage circuit for recording the signal for a predetermined period of time, writing the video display signal in an overwriting manner after lapse of the predetermined period of time, and repeating the recording operation at an interval of the predetermined period of time; and a controllable switch circuit for combining the video display

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<sup>2</sup> Cavallerano paragraph 0021

signals from the video signal processing circuit and the storage circuit and outputting a resultant signal therefrom. FIGs. 10B-10D of Nakagaki show a picture-in-picture mode where a live and recorded broadcast are simultaneously shown.

However, contrary to the Official Action, Nakagaki does not disclose or suggest Applicant's claimed time shift decoding unit configured to decode a time shift signal outputted from the recording/storing unit, wherein the time shift signal is a time delayed signal of the live signal outputted from the tuner. That is, while Nakagaki describes, a picture-in-picture mode where a live and recorded broadcast are simultaneously shown, Nakagaki does not disclose or suggest Applicant's claimed recording/storing unit or Applicant's claimed time shift decoding unit configured to decode a time shift signal outputted from the recording/storing unit, wherein the time shift signal is a time delayed signal of the live signal outputted from the tuner. In Nakagaki, the live signal is decoded. After decoding, the decoded live signal is simultaneously displayed and/or recorded. When the recorded signal is subsequently displayed as a time-delayed signal, there is no further decoding. Indeed, Nakagaki describes FIG. 6 but noting that a scene "A" of the live program is displayed on the screen 18 of the CRT 11 (FIG. 1) as shown in FIG. 6(c)); furthermore, the [decoded] scene "A" is also recorded in the memory 14 for future playback.

In short, Nakagaki decodes, stores and replays, while in Applicant's claimed invention the broadcast is stored prior to decoding, then decoded and replayed. Thus, like Cavallerano, Nakagaki does not disclose or suggest Applicant's claimed recording/storing unit or Applicant's

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<sup>3</sup> Cavallerano paragraph 0023

claimed time shift decoding unit configured to decode a time shift signal outputted from the recording/storing unit.

Similarly, both Cavallerano and Nakagaki fail to disclose or suggest the second decoder (configured to decode a time shift signal) as recited in amended independent claims 1 and 11.

Similarly, both Cavallerano and Nakagaki fail to disclose or suggest a) recording a reproducing end position of the time shift signal; and b) c) when the user requests a reproduction of a previous broadcasting again, decoding and reproducing the previous broadcasting from the recorded reproducing end position of the time shift signal, as recited in amended independent claim 17.

As none of the cited art, individually or in combination, disclose or suggest at least the above-noted features of independent claims 1, 10-11 and 17, Applicant submits the inventions defined by claims 1, 10-11 and 17, and all claims depending therefrom, are not rendered obvious by the asserted references for at least the reasons stated above.

MPEP 2141 notes that prior art is not limited just to the references being applied, but includes the understanding of one of ordinary skill in the art. MPEP 2141 further notes that the prior art reference (or references when combined) need not teach or suggest all the claim limitations. However, an obviousness-type rejection must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. MPEP 2141 goes on to list exemplary rationales that may support a conclusion of obviousness. However, Applicant submits that the Official Action and the applied references present no objective evidence that would support an obviousness-type rejection of Applicant's amended claims based on one of these exemplary rationales.

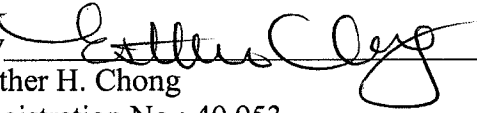
**CONCLUSION**

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael E. Monaco, Reg. No. 52,041, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.147; particularly, extension of time fees.

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Respectfully submitted,

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